Amendments To the Specification:

Please replace the paragraph under the heading "BRIEF DESCRIPTION OF THE DRAWINGS" (first paragraph, page 5) with the following paragraph:

Figs. 1A, 1B and 1C are ~~is a the~~ schematic representations of a separator for use in a ~~of the~~ method for ~~of~~ preparing tissue constructs according to one embodiment of the present invention. Fig. 1A is a front end view of a separator adapted to be secured in a culture dish via securing mean. Fig. 1B is a side view of the separator. Fig. 1C is a schematic perspective view of the separator installed in a culture flask.

Please replace the first paragraph in the Example 1 (i.e. the paragraph bridging pages 9 and 10) with the following amended paragraph:

Figs. 1A, 1B and 1C depicts the structure of a typical separator. A rigid rod a, that can be made of wood, polymer, metal or biological material, may be concealed in an elastomer matrix that is shaped in a way that allows the gap between the cells to be sufficiently small to be covered by the cells once the separator is removed, preferably a blade-like structure b with a sharp edge. The assembly has to be made of materials that can be sterilized. At both ends of the rod a, a small piece of elastomer functions as a compression fitting that allows the separator to fit tightly in place between the flask walls. When the separator is in place, the edge is in contact with the plastic surface of the culture flask c effectively separating the surface in two leak proof compartments. The different cell lines are then seeded in each compartment, and allowed to attach to the surface of the flask c before the separator is removed. More than two separators can be used simultaneously to obtain more than two different compartments. This attachment can take 1 to 24 hours, depending on the cell line used (4 hours works well with fibroblasts). The advantage of using a sharp edge

on the separator is that only a small gap is created in the cell distribution. As soon as the separator is removed, the cells quickly fill this space, resulting in a continuous cell distribution. The sheet composed of the cells and the extracellular matrix secreted is continuous, allowing the assembly of both cell types into a continuous sheet in one step.